

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. Please ~~add~~ new Claims 22-33 as indicated in the Listing of Claims below.

Listing of Claims

1. (Previously Amended) An olefin trimerization system comprising in combination:

- a) a reactor;
- b) a first inlet line for olefin reactant operably connected into said reactor from a first source of olefin reactant;
- c) a second inlet line for catalyst operably connected into said reactor from a source of catalyst, wherein said first inlet line and said second inlet line are separate from one another and are located in said reactor to provide thorough contact within said reactor of the materials they carry;
- d) a reactor effluent line from said reactor for transferring olefin reactant, catalyst and trimerization reaction products; and
- e) a separator operably connected to said reactor effluent line to separate desired trimerization reaction products.

2. (Currently Amended) A trimerization system in accordance with ~~claim~~ Claim 1, further comprising a filter operably connected into said reactor effluent line.

3. (Currently Amended) A trimerization system in accordance with ~~claim~~ Claim 1, further comprising a catalyst system deactivator inlet line operably connected into said reactor effluent line.

4. (Currently Amended) A trimerization system in accordance with ~~claim~~ Claim 1, further comprising a second source line for olefin reactant operably connected into said first inlet line for olefin reactant from a second source of olefin reactant.

5. (Currently Amended) A trimerization system in accordance with ~~claim~~ Claim 1, further comprising an inlet line operably connected into said reactor effluent line from a source of heavies.

6. (Currently Amended) A trimerization system in accordance with ~~claim~~ Claim 1, wherein said inlet line from the source of catalyst system further comprises a reactor inlet operably connected from a source of trimerization reaction solvent.

7-21. Cancelled.

22. (New) An olefin trimerization system comprising in combination:

- a) a reactor selected from a solution reactor, a slurry reactor, or a gas phase reactor;
- b) a first inlet line for olefin reactant operably connected into said reactor from a first source of olefin reactant;
- c) a second inlet line for catalyst operably connected into said reactor from a source of catalyst, wherein said first inlet line and said second inlet line are separate from one another and are located in said reactor to provide thorough contact within said reactor of the materials they carry;
- d) a reactor effluent line from said reactor for transferring olefin reactant, catalyst and trimerization reaction products; and
- e) a separator operably connected to said reactor effluent line to separate desired trimerization reaction products.

23. (New) A trimerization system in accordance with Claim 1, further comprising a filter operably connected into said reactor effluent line.

24. (New) A trimerization system in accordance with Claim 1, further comprising a catalyst system deactivator inlet line operably connected into said reactor effluent line.

25. (New) A trimerization system in accordance with Claim 1, further comprising a second source line for olefin reactant operably connected into said first inlet line for olefin reactant from a second source of olefin reactant.

26. (New) A trimerization system in accordance with Claim 1, further comprising an inlet line operably connected into said reactor effluent line from a source of heavies.


27. (New) A trimerization system in accordance with Claim 1, wherein said inlet line from the source of catalyst system further comprises a reactor inlet operably connected from a source of trimerization reaction solvent.

28. (New) An olefin trimerization system consisting essentially of, in combination:

- a) a reactor;
- b) a first inlet line for olefin reactant operably connected into said reactor from a first source of olefin reactant;
- c) a second inlet line for catalyst operably connected into said reactor from a source of catalyst, wherein said first inlet line and said second inlet line are separate from one another and are located in said reactor to provide thorough contact within said reactor of the materials they carry;
- d) a reactor effluent line from said reactor for transferring olefin reactant; catalyst and trimerization reaction products; and
- e) a separator operably connected to said reactor effluent line to separate desired trimerization reaction products.

29. (New) A trimerization system in accordance with Claim 1, further comprising a filter operably connected into said reactor effluent line.

30. (New) A trimerization system in accordance with Claim 1, further comprising a catalyst system deactivator inlet line operably connected into said reactor effluent line.

 31. (New) A trimerization system in accordance with Claim 1, further comprising a second source line for olefin reactant operably connected into said first inlet line for olefin reactant from a second source of olefin reactant.

32. (New) A trimerization system in accordance with Claim 1, further comprising an inlet line operably connected into said reactor effluent line from a source of heavies.

33. (New) A trimerization system in accordance with Claim 1, wherein said inlet line from the source of catalyst system further comprises a reactor inlet operably connected from a source of trimerization reaction solvent.
